Page 2

Application No.: 09/665,308 Docket No.: BB1149 US NA

- 32. The polynucleotide of claim 27, wherein the polypeptide is cyclin A protein.
- 33. An isolated polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID: 6 have at least 80% identity based on the Clustal alignment method.
- 34. The polypeptide of claim 33, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 have at least 90% identity based on the Clustal alignment method.
- 35. The polypeptide of claim 33, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 have at least 95% identity based on the Clustal alignment method.
- 36. The polypeptide of claim 33, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6.
 - 37. The polypeptide of claim 33, wherein the polypeptide is a cyclin A protein.
- 38. A chimeric gene comprising the polynucleotide of claim 27 operably linked to a regulatory sequence.
 - 39. An expression vector comprising the polynucleotide of claim 27.
- 40. A method for transforming a cell comprising transforming a cell with the polynucleotide of claim 27.
 - 41. The cell produced by the method of claim 40.
- 42. An isolated polynucleotide comprising a nucleotide sequence comprised by the polynucleotide of claim 27, wherein the nucleotide sequence contains at least 30 nucleotides.
 - 43. An isolated polynucleotide comprising:
- (a) a nucleatide sequence encoding a polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16 have at least 80% identity based on the Clustal alignment method, or
 - (b) the complement of the nucleotide sequence.
- 44. The polynucleotide of claim 43, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16 have at least 90% identity based on the Clustal alignment method.
- 45. The polynucleotide of claim 43, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16 have at least 95% identity based on the Clustal alignment method.
- 46. The polynucleotide of claim 43 comprising the nucleotide sequence of SEQ ID NO: 7, SEQ ID NO: 11, SEQ ID NO: 13, or SEQ ID NO: 15.

Conty.

Application No.: 09/655,308 Docket No.: BB1149 US NA

Page 3

47. The polynucleotide of claim 43, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16.

- 48. The polynucleotide of claim 43, wherein the polypeptide is a cyclin delta-1 protein.
- 49. An isolated polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16 have at least 80% identity based on the Clustal alignment method.
- 50. The polypeptide of claim 49, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16 have at least 90% identity based on the Clustal alignment method.
- 51. The polypeptide of claim 49, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10., SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16 have at least 95% identity based on the Clustal alignment method.
- 52. The polypeptide of claim 49, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, or SEQ ID NO: 16.
 - 53. The polypeptide of claim 49, wherein the polypeptide is a cyclin delta-1 protein.
- 54. A chimeric gene comprising the polynucleotide of claim 43 operably linked to a regulatory sequence.
 - 55. An expression vector comprising the polynucleotide of claim 43.
- 56. A method for transforming a cell comprising transforming a cell with the polynucleotide of claim 43.
 - 57. The cell produced by the method of claim 56.
- 58. An isolated polynucleotide comprising a nucleotide sequence comprised by the polynucleotide of claim 43, wherein the nucleotide sequence contains at least 30 nucleotides.
 - 59. An isolated polynucleotide comprising:
- (a) a nucleotide sequence encoding a polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22 have at least 80% identity based on the Clustal alignment method, or
 - (b) the complement of the nucleotide sequence.
- 60. The polynucleotide of claim 59, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22 have at least 90% identity based on the Clustal alignment method.
- 61. The polynucleotide of claim 59, wherein the amino acid sequence of the polypeptide and the amino acid sequence os SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22 have at least 95% identity based on the Clustal alignment method.
- 62. The polynucleotide of claim 59 comprising the nucleotide sequence of SEQ ID NO: 17, SEQ ID NO: 19, or SEQ ID NO: 21

Confo

Application No.: 09/665,308

Docket No.: BB1149 US NA

Page 4

63. The polynucleotide of claim 59, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22.

- 64 The polynucleotide of claim 59, wherein the polypeptide is a cyclin delta-2 protein.
- 65. An isolated polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22 have at least 80% identity based on the Clustal alignment method.
- 66. The polypeptide of claim 65, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22 have at least 90% identity based on the Clustal alignment method.
- 67. The polypeptide of claim 65, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22 have at least 95% identity based on the Clustal alignment method.
- 68. The polypeptide of claim 65, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 18, SEQ ID NO: 20, or SEQ ID NO: 22.
 - 69. The polypeptide of claim 65, wherein the polypeptide is a cyclin delta-2 protein.
- 70. A chimeric gene comprising the polynucleotide of claim 59 operably linked to a regulatory sequence.
 - 71. An expression vector comprising the polynucleotide of claim 59.
- 72. A method for transforming a cell comprising transforming a cell with the polynucleotide of claim 59.
 - 73. The cell produced by the method of claim 72.
- 74. An isolated polynucleotide comprising a nucleotide sequence comprised by the polynucleotide of claim 59, wherein the nucleotide sequence contains at least 30 nucleotides.
 - 75. An isolated polynucleotide comprising:
- (a) a nucleotide sequence encoding a polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 24, SEQ ID NO: 26, or SEQ ID NO: 28 have at least 80% identity based on the Clustal alignment method, or
 - (b) the complement of the nucleotide sequence.
- 76. The polymucleotide of claim 75, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 24, SEQ ID NO: 26, or SEQ ID NO: 28 have at least 90% identity based on the Clustal alignment method.
- 77. The polynucleotide of claim 75, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 24, SEQ ID NO: 26, or SEQ ID NO: 28 have at least 95% identity based on the Clustal alignment method.
- 78. The polynucleotide of claim 75 comprising the nucleotide sequence of SEQ ID NO: 23, SEQ ID NO: 25, or SEQ ID NO: 27.
- 79. The polynucleotide of claim 75, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 24, SEQ ID NO: 26, or SEQ ID NO: 28.



Application No.: 09/665,308

Docket No.: BB1149 US NA Page 5

The polynucleotide of claim 75, wherein the polypeptide is a cyclin delta-3 protein.

- 81. An isolated polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 24, SEQ ID NO: 26, or SEQ ID NO: 28 have at least 80% identity based on the Clustal alignment method.
- The polypeptide of claim 81, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 24, SEQ ID NO: 26, or SEQ ID NO: 28 have at least 90% identity based on the Clustal alignment method.
- 83. The polypeptide of claim 81, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO: 24, SEQ ID NO: 26, or SEQ ID NO: 28 have at least 95% identity based in the Clustal alignment method.
- 84. The polypeptide of claim 81, wherein the polpeptide comprises the amino acid sequence of SEQ ID No: 24, SEQ ID NO: 26, or SEQ ID NO: 28.
 - The polypeptide of claim 81, wherein the polypeptide is a cyclin delta-3 protein.
- A chimeric gene comprising the polynucleotide of claim 75 operabley linked to a regulatory sequence.
 - 87. An expression vector comprising the polynucleotide of claim 75.
- 88. A method for transforming a cell comprising transforming a cell with the polynucleotide of claim 75.
 - The cell produced by the method of claim 88. 89.
- 90. An isolated polynucleotide comprising a nucleotide sequence comprised by the polynucleotide of claim 75, wherein the nucleotide sequence contains at least 30 nucleotides.

REMARKS

Claims 1-26 have been cancelled, and claims 27-90 have been added. Claims 27-90 are pending. It is respectfully requested that the amendments above be entered before examination of the application.

Support for sequence identities of 80%, 90%, and 95% is found on page 6, lines 32-37 of the specification. Support for claims 42, 58, 74, and 90 is found on page 7, line 14 of the specification.

Application No.: 09/665,308 Docket No.: BB1149 US NA

Please charge a fee of \$1,102.00 to Deposit Account 04-1928

(E. I. du Pont de Nemours and Company). If this fee is insufficient or incorrect, please charge or credit the balance to the above-identified account.

In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,
Thomas Marin

THOMAS M. RIZZO

ATTORNEY FOR APPLICANTS

REGISTRATION NO. 41,272

TELEPHONE: 302-892-7760

FACSIMILE: 302-892-1026

Dated: Thrente 9 2000

S:\Patent Documents\Ag Products\BB-10xx-BB-11xx\Bb-1149\Prelim Amend BB1149 US NA.doc